Message

From: Partridge, Charles [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=27DA56DA9A12472787EF56077099CF36-PARTRIDGE, CHARLES]
Sent: 1/28/2020 6:05:33 PM
To: Barnicoat, Dana [Barnicoat.Dana@epa.gov]
Subject: FW: Butte Health Study draft final report - summary of final edits
Attachments: Draft Public Roll Out Schedule .docx

From: Frisch, Greg <Greg.Frisch@bp.com>
Sent: Tuesday, January 28, 2020 10:12 AM
To: Partridge, Charles <Partridge.Charles@epa.gov>; Bryson, Josh <josh.bryson@bp.com>; Greene, Nikia <Greene.Nikia@epa.gov>; Hassler, Eric <ehassler@bsb.mt.gov>; Reed, Daryl <dreed@mt.gov>; Sullivan, Karen <ksullivan@bsb.mt.gov>
Cc: Nazminia, Cameron <Cameron.Nazminia@bp.com>
Subject: RE: Butte Health Study draft final report - summary of final edits

Attached is the draft schedule. Let me know if you have any questions.

Greg

From: Partridge, Charles <Partridge.Charles@epa.gov>
Sent: Tuesday, January 28, 2020 9:14 AM
To: Bryson, Josh <josh.bryson@bp.com>; Greene, Nikia <greene.nikia@epa.gov>; Hassler, Eric <ehassler@bsb.mt.gov>; Reed, Daryl <dreed@mt.gov>; Sullivan, Karen <ksullivan@bsb.mt.gov>
Cc: Nazminia, Cameron <Cameron.Nazminia@bp.com>; Frisch, Greg <Greg.Frisch@bp.com>
Subject: RE: Butte Health Study draft final report - summary of final edits

Can you send me the schedule of public presentations?

cp

From: Bryson, Josh <josh.bryson@bp.com>
Sent: Tuesday, January 28, 2020 8:55 AM
To: Greene, Nikia <Greene.Nikia@epa.gov>; Hassler, Eric <ehassler@bsb.mt.gov>; Reed, Daryl <dreed@mt.gov>; Partridge, Charles <Partridge.Charles@epa.gov>; Sullivan, Karen <ksullivan@bsb.mt.gov>
Cc: Nazminia, Cameron <Cameron.Nazminia@bp.com>; Frisch, Greg <Greg.Frisch@bp.com>
Subject: RE: Butte Health Study draft final report - summary of final edits

Ex. 5 Deliberative Process (DP)

Josh

From: Greene, Nikia <Greene.Nikia@epa.gov>
Sent: Tuesday, January 28, 2020 8:13 AM
To: Bryson, Josh <josh.bryson@bp.com>; Hassler, Eric <ehassler@bsb.mt.gov>; Reed, Daryl <dreed@mt.gov>; Partridge, Charles <Partridge.Charles@epa.gov>; Sullivan, Karen <ksullivan@bsb.mt.gov>
Subject: FW: Butte Health Study draft final report - summary of final edits

Ex. 5 Deliberative Process (DP)

Your thoughts please.

Thanks,

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From: John Ray Ex. 6 Personal Privacy (PP)
Sent: Saturday, January 25, 2020 6:38 AM
To: Seth Cornell Ex. 6 Personal Privacy (PP) ; Steve Ackerlund <steve.ackerlund@bresnan.net>; Hutchins, David <dhutchins@mtech.edu>; Greene, Nikia <Greene.Nikia@epa.gov>; Partridge, Charles <Partridge.Charles@epa.gov>; 'Eric Hassler' <ehassler@bsb.mt.gov>; Sullivan, Karen <ksullivan@bsb.mt.gov>; 'Bill Macgregor' Ex. 6 Personal Privacy (PP) 'Crain, Julia' <jcrain@bsb.mt.gov>; 'Zimmerman, Heather' <hzimmerman@mt.gov>; 'Palmer, Dave' <dpalmer@bsb.mt.gov>; cvanlandingham@ramboll.com; Wardell, Christopher <Wardell.Christopher@epa.gov>; Wendel, Arthur (ATSDR/DCHI/WB) <dvq6@cdc.gov>; 'Joe Griffin' <jgriffin.redmountain@gmail.com>; Williamson, Laura <lwilliamson@mt.gov>; Ferguson, Matthew <matthew.ferguson@mt.gov>; 'Lynn Woodbury' <woodburyl@cdm.com>; 'Brandon Warner' <bwarner@bsb.mt.gov>; Lynn Woodbury <woodburyl@cdmsmith.com>; Bryson, Josh <josh.bryson@bp.com>; Rosalind A. Schoof <rschoof@ramboll.com>
Cc: 'Nazminia, Cameron' <cameron.nazminia@bp.com>; Barnicoat, Dana <Barnicoat.Dana@epa.gov>; John Ray Ex. 6 Personal Privacy (PP) ; Patricia A. Gallery <patricia.gallery@bp.com>; David Williams Ex. 6 Personal Privacy (PP) Mutter, Andrew <mutter.andrew@epa.gov>; Smidinger, Betsy <Smidinger.Betsy@epa.gov>
Subject: Re: Butte Health Study draft final report - summary of final edits

Now that the Health Study report is essentially done, I was wondering what were the plans to release it to the public.
By that I don't simply mean an announcement that it is finished, it is available to the public and here is a brief summary of what was found.
I mean more of a comprehensive approach to public education, campaign if you will, about the contents of the report which would include media, presentations to select stakeholder groups such as the Council of Commissioners, CTEC, fact sheet that might be inserted in the paper, etc.

This is a significant report that contains important information. The public needs to know about it.

It provides hard data that indicates that Butte has made significant strides in addressing the problem of lead in children. As I have said before, the RMAP program in Butte is an unprecedented success in addressing a major public health problem. It goes far beyond anything that could be mandated or ordered under Superfund and represents a highly successful cooperative effort between local government, EPA and BP/ARCO. Whenever I go to a national conference and this problem is brought up, people marvel at how we were able to obtain such a program under Superfund. In particular, Nikia has been totally committed to the success of this effort.

The EPA office in Denver and the MDPHHS office in Helena have provided much needed expertise for the health study which assistance has gone far beyond anything that is required under Superfund. The Butte Health Department has demonstrated a strong commitment to protecting public health in Butte and should be thanked for its great effort. The Health Department takes seriously the potential health effects of exposure to the toxics of concern in Butte and is a needed and effective partner in the cleanup. Also, Roz's efforts in coordinating and producing this report are amazing. She has addressed this herculean task with empathy, competence and organizational skill.Thank you Roz for your work; well done indeed.

Even the mandate for a health study every five years to assess progress in addressing lead levels in children goes far beyond what is done at other Superfund sites in the country. It represents a commitment by EPA to actively monitor the success of its cleanup and few, if any, other Superfund sites in the country have such an evaluation program. Usually whatever health study review is conducted at other Superfund sites is done under the auspices of the five year reviews and not separate, independent studies. ARCO has also gone far beyond its requirements under Superfund in investing time, resources and money into this project. ARCO's support has been most welcome. As I said, it is a model of successful collaboration between affected parties.

this Health Study process has not been an easy process but it has yielded significant results. Is there more to do? Of course. For example, in the future I would like to see more emphasis on environmental justice issues. How to meaningfully involve the public while at the same time operating efficiently and effectively is always a challenge.
But we have a quality product that should be widely disseminated.

So I think we need to develop a comprehensive public education campaign designed not just to inform the public but involve them in a meaningful way.

Dr. John W. Ray

On Friday, January 24, 2020, 5:36:28 PM MST, Rosalind A. Schoof <rschoof@ramboll.com> wrote:

Hi All,

I am done revising the medical monitoring report and have summarized the significant new text below. I am sending the document to BP and BSB for their final review, after which they will forward the report to EPA and DEQ. If you have final comments on these changes, please respond and I will try to address before BP and BSB forward to EPA and DEQ. Note that I do have a few comments where I still need input or confirmation of my changes from BSB.

1. P. iii revised section on As and Hg per Laura's note that mercury was not addressed: "Soil mercury levels have only rarely been found to be elevated so no mercury biomonitoring has been conducted." (Steve suggested deleting mercury from the header, but I think we need to leave it in).
2. P. iii. Revised WG recommendation to be consistent with rest of report (per Laura's note): "Working Group also recommends it be maintained as an active group, meeting at least several times per year to facilitate implementation of the recommendations and to plan for the next study."
3. P. 2 at end of 1st par. On studies of cancer and other diseases: "In addition, self-reported rates of common diseases and risk-related behaviors (e.g., smoking) for Butte are compared with rates in the rest of Montana and in the U.S. in the periodic community health needs assessments conducted by BSBHD (most recently in 2017)."
4. P. 3 Augmented 2nd RMAP recommendation: "• Establishment of a position within the BSBHD for an environmental health clinician specializing in pediatrics. It is recommended that this person conduct additional outreach to local physicians and clinics to increase screening and data availability for young children and pregnant women consistent with clinical recommendations for communities with lead risk factors (such as older housing with lead-based paint in Butte)."

5. P. 9 New last par.: "BSBHD is developing a searchable database that will enable the public to access data for specific parcels. BSBHD can also provide links to versions of Figures 1 and 2 that can be zoomed to view in greater detail." [BSB, please confirm language]
6. P. 25 at the end of the lead bioavailability section: "The bioavailability of lead in Butte indoor dust is also expected to be lower than the IEUBK default value; however, because no site-specific bioavailability data for dust were available the default value was used by USEPA in the HHRA and to develop the soil lead action level. Similarly, USEPA assumed the default value in assessing attic dust." [Note: the arsenic section describes the site-specific dust data used in the HHRA].
7. P. 54 summary of biomonitoring studies added: "Since 1990, a series of biomonitoring studies have been conducted in Butte, resulting in a more comprehensive picture of lead exposures than for almost any other U.S. mining community. The 1990 University of Cincinnati study (BSBDH/UC 1992) included almost 300 children and provided comprehensive analysis of lead and arsenic exposure. Exposures were not found to be markedly elevated, but differences among neighborhoods prompted formation of RMAP program. The ATSDR (2001) Walkerville study in 2000 included 23 blood lead samples, and 25 urine arsenic samples. Despite targeting homes with elevated dust concentrations, exposures were not elevated (all BLLs were below levels of concern and all urine arsenic was below limit of detection). The 2014 Phase 1 medical monitoring study (Ramboll 2014, Schoof et al. 2016) included BLLs for nearly 3,000 Butte children collected from 2003 through 2010. By 2010 mean BLLs were the same as expected for a comparable community with no mining influence, but the percentage above 5 µg/dL was still elevated. The Hailer et al. (2017) study focused on adults and incorporated measures of metals in hair and blood, finding elevated levels of some metals in hair, but the study limitations preclude any conclusions about the source of the arsenic or the significance of the finding to exposure and risk from historic mine materials."
8. P. 55 Section 5 introduction revision: "This section provides a brief review of epidemiological methods to study rates of diseases and linkages to possible causes, followed by a summary of five epidemiological studies conducted in Butte-Silver Bow County (only studies published by September 2019 are included). The results of self-reported disease prevalence studies conducted as part of the periodic community needs assessments conducted by BSBHD are described in Section 2.2.1."
9. P. 56, fist paragraph my revisions, but needs Karen to review: "Based on the community description presented in Chapter 2, examples of factors that affect death rates that may be different in Butte than in Montana or the U.S. (or have been different in the past) include smoking rates, alcohol and drug use, age distribution, urbanization, obesity rates, and socioeconomic status. Many of these factors have been identified in the Butte community needs assessments (PRC 2014, 2017; Section 2.2) as possibly adversely affecting health status in Butte, although some have changed over time. For example, a high percentage of Butte adults are overweight, whereas smoking rates and risk factors for cardiovascular disease declined to levels at or below seen throughout Montana between the 2014 and 2017 assessments.). [new paragraph] These current and historical lifestyle attributes are risk factors for many diseases. Environmental factors other than historical mining operations may also be affecting health in Butte. Historically air quality was affected by residential wood burning but, after a campaign to reduce emissions from wood stoves, air particulate levels are now less of a problem in Butte [Can BSB provide a reference for this statement?]. Thus, the interrelationships between these various extrinsic factors (i.e., physical, chemical, biological, psychosocial, demographic, etc.) over time must be considered to allow meaningful interpretation of population-level health comparisons, and epidemiology results need to be interpreted in the context of the strengths and limitations of each study in accounting for these extrinsic factors. All scientific studies have their particular strengths and limitations, which is why we review all pertinent studies in this report to develop informed judgements about health concerns in Butte. "
10. P. 68 Summary of epi studies: Moved two paragraphs on incidence vs mortality to Section 5.1 per comment of Laura, and added these two introductory paragraphs: "Five studies of disease prevalence in Butte were identified, beginning with an ecological study of skin cancer published in 1992, and followed by three surveillance studies of cancer incidence for the Butte population compared with state and/or national data in 2002, 2012 and 2018, and a study of multiple diseases published in 2017. The 2012 and 2018 studies also considered cancer mortality rates. The periodic community needs assessments conducted by BSBHD also provide self-reported disease prevalence rates in comparison with rates in Montana and the U.S. (described in Section 2). [new paragraph] Wong et al. (1992) conducted an early ecologic study of skin cancer for Silver Bow and Deer Lodge counties that showed higher skin cancer rates in the two control counties, likely due to higher rates of farming and associated exposure to sunlight. In contrast, the first Butte-Silver Bow County cancer incidence study examining multiple types of cancer conducted by ATSDR in 2002 found elevated skin cancer rates, while skin cancer prevalence has not been found to be elevated in the most recent community needs survey. In 2012, MDPHHS conducted an analysis of cancer incidence and mortality in Butte-Silver Bow County, which was followed by an update in 2018. Davis et al. (2019) published an ecological study that examined mortality rates for Deer Lodge and Silver Bow counties combined. No consistent trends have emerged from these studies suggesting elevated rates of disease that are likely associated with environmental exposures.

11. P. 101 summary of soil action levels, inserted: "The bioavailability of lead in Butte soil was found to be very low. No site-specific studies were conducted using Butte indoor dust, so the default assumptions were applied, i.e., assuming lead is more readily absorbed from dust than from soil."
12. P. 102 added community survey result summary [Need BSB review]: "Self-reported disease and risk factor prevalence studies were also conducted as part of the periodic community needs assessments conducted by BSBHD. The 2017 assessment reported that rates of diabetes, skin cancer and smoking were lower in Butte than in the rest of Montana or the U.S., while rates of asthma, chronic obstructive pulmonary disease, Alzheimer's and kidney disease were higher than the rest of Montana or the U.S. Rates for all kinds of cancer and for cardiovascular risk factors were the same as in the comparison groups. Rates of smoking and cardiovascular risk factors had declined significantly since the 2014 assessment."
13. P. 105 discussion of lead in drinking water, revised the last sentence per input from Eric: "The 1990 Blood Lead and Urine Arsenic Study (BSBDH/UC 1992) documented elevated tap water concentrations across all Butte neighborhoods, a finding that is not consistent with current conditions which include management of pH and addition of corrosion controls to reduce lead leaching potential."
14. P. 105 revised ending to the paragraph discussing risk factors in Butte vs NHANES: "The greatest risk factor is potential lead paint exposures due to the very old housing stock in much of Butte. Because the RMAP only addresses lead paint when necessary to protect soil that has been remediated or when investigating a reported elevated BLL, this risk factor is likely to persist even when remediation is complete."

Once again, thank you for your support throughout this effort.

Regards,

Roz

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